

Integrated Transport Unit, Road Safety Team.

# **Harbourside, NPT.**

## **Stage 3. Road Safety Audit**

*Design Completion of Works – “As Built.”*



*Report Reference No 000257*

## Document Control

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# 1. Project Details

## 1.1 Project Details

|                                               |                                                                            |
|-----------------------------------------------|----------------------------------------------------------------------------|
| <b>Report Title:</b>                          | <i>Harbourside Strategic Employment Site<br/>Stage 3 Road Safety Audit</i> |
| <b>Date:</b>                                  | <i>27th May 2022</i>                                                       |
| <b>Document Reference &amp;<br/>Revision:</b> | <i>000-257<br/>Rev. – 1.0</i>                                              |
| <b>Prepared By:</b>                           | <i>L.H.Jones</i>                                                           |
| <b>On Behalf of:</b>                          | <i>Swansea Council</i>                                                     |

## 2. Introduction

### 2.1 Background

This report results from a Stage 3. Road Safety Audit carried out on the Harbourside Strategic Employment Site – A new link road will be constructed from the existing Oakwood Road heading west into the proposed development site. The new road will entail three proposed junctions along its spine and will finish with a junction onto Harbourside Road. The proposed highway will allow for the further development of the employment district to entice new start up's and Tech businesses to regenerate the once thriving Port Talbot Dock Land area.

2.1.1 The Road Safety Audit has been undertaken at the request of Mr Martin Brumby, the Neath Port Talbot County Borough Council *Overseeing Organisation Project Manager*. The audit was carried out during *March 2022*.

2.1.2 The Road Safety Audit Team membership approved by Mr Martin Brumby, the Neath Port Talbot County Borough Council *Overseeing Organisation Manager*.

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Cert.Comp**

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Audit Team members marked with an asterisk above hold a Highways England Approved Certificate of Competency (CoC) in Road Safety Audit, in accordance with Article (1–3) of EC Directive 2008/96/EC.

2.1.3 The audit took place at the Traffic *office* of City & County of Swansea on *24th March 2022*. The Road Safety Audit was undertaken in accordance with the Road Safety Audit Brief provided and approved by Mr Martin Brumby, the *Overseeing Organisation Project Manager*. The audit comprised an examination of the documents provided in the Brief as detailed in Appendix A.

- 2.1.4 The Audit Team visited the site together during the morning of 23 March 2022 between 09.30 and 11:00. During this site visit the weather was dry, *cloudy with sunny periods giving a dry road surface*. At the time of the site visit the new route was not open to traffic.
- 2.1.5 The terms of reference of the audit are as described in GG 119 Rev.2. The team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria. This Road Safety Audit has been undertaken based on the Road Safety Audit Team's previous experience and knowledge in undertaking Collision Investigation, Road Safety Engineering and Road Safety Audits.
- 2.1.6 The scheme is – Neath Port Talbot Council as part of their Strategic Investment Plan implement improvement works which will be the catalyst for the redevelopment of the town's former docks area into a thriving waterfront business and industrial centre. The regeneration work includes remediation to former brownfield land, construction of an access road, upgrading of existing highways, flood mitigation measures and an extension to the car park adjacent to Port Talbot Parkway Railway Station.
- 2.1.7 The Audit Team *have not* been informed of any Departures from Standard for the scheme.
- 2.1.8 The scheme has been examined and this report compiled only regarding the safety implications for road users of the scheme as presented. It has not been examined or verified for compliance with any other Standards or criteria. However, to clearly explain a safety problem or the recommendation to resolve a problem, the Audit Team may on occasion have referred to a design standard for information only. Any audit comments should not be construed as implying that a technical audit has been undertaken in any respect.
- 2.1.9 Any recommendations included within this report should not be regarded as being prescriptive design solutions to the problems raised. They are intended only to indicate a proportionate and viable means of eliminating or mitigating the identified problem, in accordance with GG 119, and in no way, imply that a formal design process has been undertaken. There may be alternative methods of addressing a problem which would be equally acceptable in achieving the desired elimination or mitigation and these should be considered when responding to this report.

### 3. Items Raised at the Stage 2 Audit

#### 3.1 Problem 1

**Location:** Footway adjacent to the attenuation pond.

**Summary:** No fence line is shown around the pond to deter access by pedestrians.

The drawing shows that the steepest section of the attenuation pond is directly adjacent to the footway with no means of preventing pedestrian access. Without a deterrent it could lead to pedestrians inadvertently falling into the attenuation pond.

**Recommendation:** It is recommended that a fence line is implemented along the perimeter of the attenuation pond.

It is also recommended that a life preserver is placed near to the pond.

#### **Problem addressed**

#### 3.2 Problem 2

**Location:** Cramic Way, northern side.

**Summary:** Main railway line easily accessible.

During the site visit it was observed that in sections the vegetation had been cleared away from the highway verge which due to the relative low height of the fence would make accessibility to the railway line and platform easy.

The Audit Team are concerned that the ease in which access to the main line can be achieved which could result in obstruction or injury on the line

**Recommendation:** It is recommended that the height of the fence be increased and that British Rail be contacted with regard to any further measures they see fit to make the line safe.

#### 3.3 Problem 3

**Location:** Attenuation pond.

**Summary:** Depth of permanent water.

The drawings show that the permanent depth of water in the pond is at almost half a meter in depth. This would be sufficient in depth to cause drowning should a vehicle become errant and come to rest cockpit down.

Although the speed limit looks to be of 30 mph, the proximity of the attenuation pond to the entry radii off the roundabout and the change in alignment for vehicles heading east towards the roundabout raises the concern.

**Recommendation:** It is recommended that the Designer implement a safety fence to protect against entry to the attenuation pond from an errant vehicle.

### 3.4 THE ALIGNMENT

#### Problem 4

**Location:** Tie into carriageway of the Court, Ch 0.00 to Ch 85.00.

**Summary:** Forward visibility for drivers in both direction a concern.

Drivers turning left in to the link road from the Court Carriageway could come into conflict with drivers heading west along the proposed link road if they cannot see each other due to the alignment of the vertical curve, which could lead to front off side collisions and side swipe type incidents.

**Recommendation:** It is recommended that the Designer provide a vertical alignment in order to accommodate ample visibility

**Problem addressed**

### 3.5 THE JUNCTIONS

There are no safety Audit items identified at this time.

### 3.6 NON MOTORISED USER PROVISION

#### Problem 5

**Location:** Footway and footpath adjacent to the ditch.

**Summary:** Mobility scooters.

The drawing shows that the dropped crossing features are on the southern side of the carriageway. The footway is adjacent to the ditch and there is concern as to what the turning radius is of a motorised scooter turning onto the footway from the carriageway.

Should this turning radius be too great the scooter nearside wheels of the scooter could overspill onto the edge of the ditch resulting in its occupant becoming errant.

**Recommendation:** It is recommended that the Designer shows that there is sufficient turning space for a motorised scooter to embark onto the footway safely.

**Problem addressed**

### 3.7 Problem 6

**Location:** Footway on northern side.

**Summary:** Lack of dropped crossings.

The two proposed accesses on the northern side of the carriageway have no provision for dropped crossings which would make it difficult for vulnerable users to negotiate and could lead to them utilising the carriageway instead placing them in conflict with vehicular traffic.

**Recommendation:** It is recommended that the Designer implement dropped crossings along the northern section of the highway and at the eastern end of the scheme to connect to the PDR.

**Problem addressed**

## 4. Items Raised at this Stage 3 Audit

### 4.1 General

#### 4.1.1 Problem 1 (Refer to Figure 6)

**Location:** Near side verge upon entry to the development.

**Summary:** Extent of and sloping end of safety fencing does not provide sufficient protection.

The extent of the safety fencing implemented is not sufficient to deter entry to the attenuation pond from the carriageway if a vehicle became errant off the entry radii, this is exacerbated by the sloping finish of the fencing detail provides a ramp effect for errant vehicles. Should a vehicle become errant at this point it could lead to serious or fatal type of injury.



*Location of Problem*

**Recommendation:**

It is recommended that The Designer re-examines the layout of the fencing detail to provide greater protection to the attenuation pond.

## 4.2 Local Alignment

4.2.1 No specific road safety issues have been identified at this stage.

## 4.3 Junctions

4.3.1 No specific road safety issues have been identified at this stage.

## 4.4 Non-Motorised User Provision

### 4.4.1 Problem 2 (Refer to Figure 6)

**Location:** T Junction between new access road and existing access road of industrial units.

**Summary:** *Lack of signing of cycle route.*

There is concern that the new shared route does not have any signage to provide continuity from the existing to the new route. Although the Audit Team have been made aware that it could be a year or more until occupation of the site is undertaken, if the route is to be utilised then it should be appropriately signed. If signing is not provided it could lead to vulnerable users taking an inappropriate direction to where no facilities are provided such as the peripheral distributor road to the south which could lead to collision with a vehicle resulting in serious or fatal injury.



### Recommendation

It is recommended that – to address the problem without leading the designer and being too prescriptive. It is for the designers to address the problem raised.

#### **4.5 Road Signs, Carriageway Markings.**

4.5.1 No specific road safety issues have been identified at this stage.

#### **4.6 Telematics and Lighting.**

4.6.1 No specific road safety issues have been identified at this stage.

#### **4.7 Vegetation and Landscaping**

4.7.1 No specific road safety issues have been identified at this stage.

#### **4.8 Issues outside the Audit Brief - Observations and Comments**

Whilst attending the site to undertake the RSA, Boulders were in position to prevent usage of the new carriageway. The Client has informed the RSA Team that a date has not been set to remove these and open the estate roads. Whilst the RSA Team appreciate that the Client has provided this information the problems listed in this document should be addressed prior to the boulders being removed and the carriageway opened.

## 5. Audit Team Statement

We certify that this Road Safety Audit has been carried out in accordance with GG 119 Rev.2.

### AUDIT TEAM LEADER

*Name: L H Jones*

*Position: Principle Traffic Engineer*

*Company :City & County of Swansea*

*Address*

Signed:



Date: 2nd June 2022

### AUDIT TEAM MEMBER

*Name: Mike Pinske*

*Position: Senior Traffic Engineer*

*Company: City & County of Swansea*

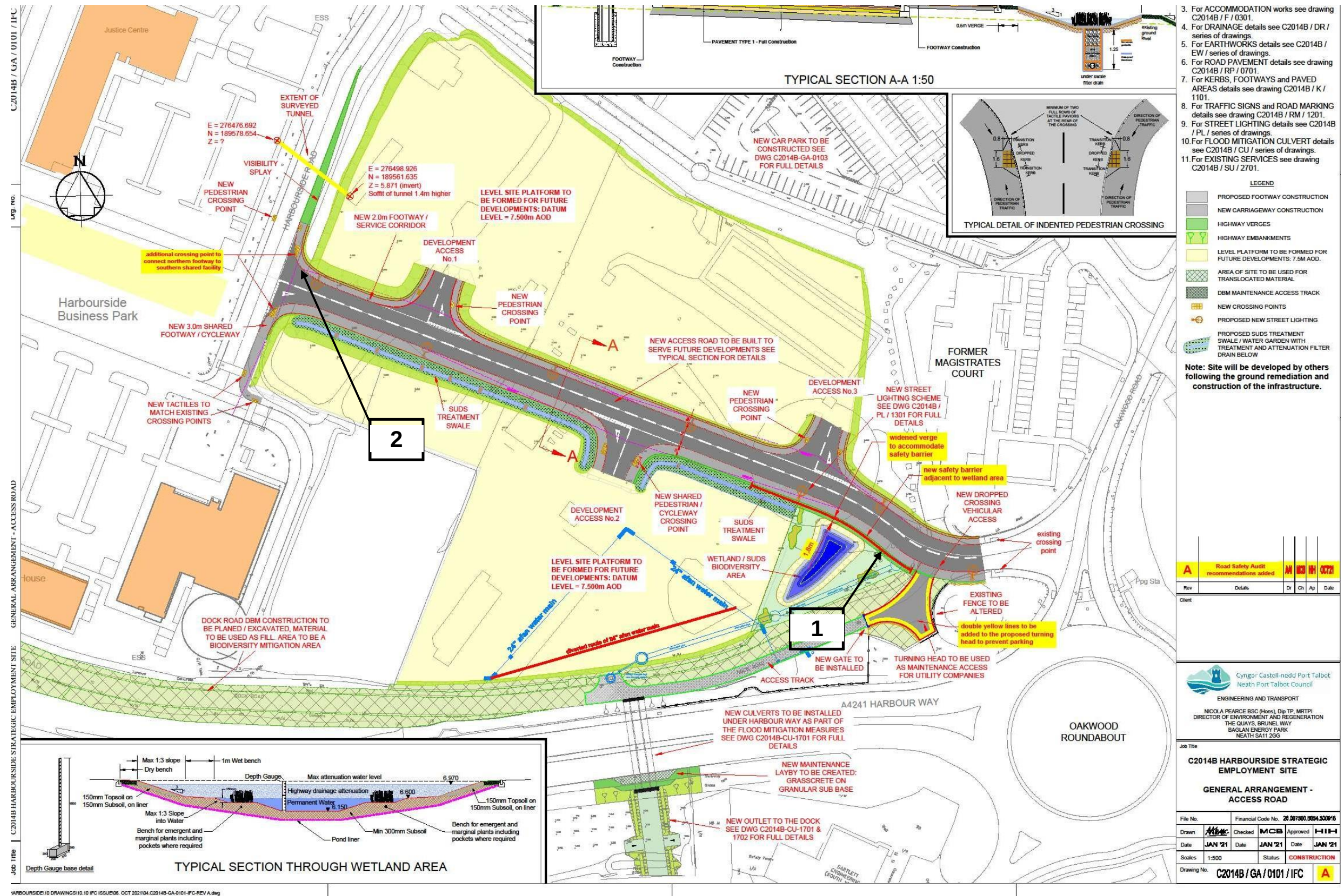
*Address*

Signed:



Date: 2nd June 2022

### 6.1 Location Plan (Figure 1)



## 7. Appendices

### 7.1 Appendix A: List of Documents/Plans supplied by Design Organisation

Stage 3 Road Safety Audit Brief – Dated *10th March 2022*

Neath Port Talbot Engineering and Transportation,  
Design Organisation - Highway Drawings:

04.C2014B-GA-0101-IFC-Rev A                      General Arrangement Access Road

### 7.2 Appendix B: Other Information considered by RSA Team

*Collision Data.*                      *None(Brown field site)*

*Previous Road Safety Audits*